

Shops, Showrooms

IKEA Store in Chieti

San Giovanni Teatino, Chieti. IKEA presents its new 100% eco-sustainable store featuring impeccable design and application of innovative low impact technologies.

IKEA has opened a new store in the town of San Giovanni Teatino, province of Chieti, near the Pescara Ovest exit on the A14. The new store is built on about 40,600 square metres of land, measures about 22,000 square metres and also required some road works and landscaping of a portion of the lot. The rectangular construction measures about 168x1206 m and is built on 5 levels: a two-level parking lot; the store on the third and fourth levels and a fifth level housing technical installations and utilities under the roof. The complex also includes a loading bay on a single level. In structural terms, the construction is characterised by deep foundations with sunken piles and prefabricated structures above ground, apart from a series of dividers and stairways and elevator shafts, which were built on site and provide bracing, and prefabricated decks with a structural roof also built on site.

[BMS progetti](#) worked on the executive civil, structural and technical plan of the store and parking lots, and also coordinated the specialised earthmoving plan. [BMZ impianti](#) was the member of the design team in charge of designing the mechanical and electrical installations, while [Studio Massacesi](#) supervised the construction work.

Key team members:

Riccardo Giordano

Environmental Manager IKEA Italy

The Swedish company has taken the issue of environmental and social sustainability to heart as one of the keys to the entire organisation's growth over the next 15 years. Ikea has a specific strategy in place for addressing environmental and social concerns in everything it does, and specifically the process of designing, building and running its stores. Ikea focuses in particular on energy issues, in terms of both efficiency and generation of renewable energy; the group's rather ambitious goal is to become completely "carbon neutral", that is, energy self-sufficient. This is a challenging goal for an individual store, but it can more easily be achieved at the group-wide level by balancing energy consumption with use of energy from renewable sources. Other issues involved in environmental management of Ikea stores are waste treatment and water consumption in store operation and ancillary services for customers. The store uses rainwater and offers a station for free distribution of still and sparkling water for all Ikea Family Card holders. The store collects recyclable wastes separately, including both wastes generated by store operation and wastes from customers, making the store a provider of environmental services.

Ikea focuses on these areas in its communications because it is important to ensure that customers understand how sensitive the group and the store are to environmental issues. One example is the use of panels showing customers at the new store how energy is generated from renewable sources.

Antonio Pasqualicchio

Country Facility Manager IKEA Italy

The San Giovanni Teatino store is Ikea's twentieth store in Italy, opened in August 2012. IKEA has more than 300 stores all over the world, and the company has always been particularly aware of the impact of these facilities on the environment, which is why IKEA set up the project called IGR (IKEA Goes Renewable) in 2007, with the intention of implementing technological solutions for reducing environmental impact and CO₂ emissions. IKEA has set itself two major goals to be achieved by 2015: cutting energy consumption by 20% and making large-scale use of renewable energy sources. This store implements solutions such as photovoltaic installations, air-driven heat pumps, inverters for air supplies and Led lighting.

Nicola Malatesta

[*BMS Progetti*](#)

The most interesting thing about the IKEA project in Pescara was systematic application of the concept of integrated design. Our company can perform all the key activities involved in building any kind of construction, including structures, architecture and technological installations, which is why IKEA turned to us. The building is entirely designed to optimise use of materials with the utmost efficiency, though without compromising on IKEA's standards for its image.

Luca Stefanutti

[*BMZ Impianti*](#)

BMZ Impianti was the member of the design team in charge of designing the mechanical and electrical installations. IKEA helped us out by clearly stating its goals and basic requirements for the entire project when asking us to join the team. The starting point was the most recently built IKEA store, which used heat pumps with water from the aquifer in its water heaters and chillers for climate control ([FOCS-N/CA/S 2422](#) and [RECS/B/S/1152](#)). In this project, we chose heat pumps that use air as a heat source, which in this location's favourable climate offers high energy efficiency year-round as well as easy installation on the roof of the building. The other aspect of general design BMZ was concerned with was optimising the scale of the system exactly as required to guarantee the heating and cooling potential necessary for the building. The heating and cooling centre ([FOCS/CA/B/s 2601](#)) is built to supply 1800 kW of chilling power and 1200 kW of heating power. There is also a separate chiller for the offices. Hot tap water, used primarily in the kitchen, is produced partly by recovering heat from one of the chillers and partly with solar panels. The store's hot water production based on electricity generation eliminates the need for gas-fired heat generators, entirely eliminating the environmental impact of local CO₂ emissions. Electrical heat pumps are integrated with the rooftop photovoltaic installation to cover part of the system's electricity requirements.

Remo Massacesi

[*Studio Massacesi*](#)

Our studio oversaw the work planned by engineer Stefanutti under IKEA's technical direction. Supervision of the work complied with the requirements for the project and above all provided the builder with incentives to review the entire project with the aim of identifying any possible further optimisation and assessing the initial construction costs and operating costs. IKEA is particularly conscious of the need to continue improving the energy efficiency of its stores to save money and help the environment: an attitude for which the Swedish company is renowned. The installation is not expressly meant to be a cost centre, but a developer of environmental quality making it possible to obtain a certain performance at the lowest possible cost in terms of energy, saving on primary energy consumption.